

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : SANYO ELECTRIC CO LTD

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(54) PERSONAL IDENTIFICATION DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a personal identification device capable of performing accurate identification by one time of identifying operation.

SOLUTION: In this personal identification device, plural CCD cameras 12 and 14 for photographing the blood vessel image of a finger are arranged in the device body having finger inserting hole and these CCD cameras 12 and 14 are connected to an information processor 6. The information processor 6 is provided with an image processing circuit 2 for recognizing a three-dimensional blood vessel pattern on the basis of the blood vessel image provided from the CCD cameras 12 and 14 and an arithmetic processing circuit 3 for extracting plural feature amounts from the blood vessel pattern and collating these extracted data with registered data in a memory 5 and in the case of collating both the data, this arithmetic processing circuit 3 applies processing of coordinate system rotation around the central axis of the finger inserting hole and decides similarity between correction data provided thereby and the other data.

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graph TD
    Hand[Hand with Finger] --> Hole[Inserting Hole 5]
    Hole --> Body[Device Body]
    Body --> Camera1[CCD Camera 12]
    Body --> Camera2[CCD Camera 14]
    Body --> Processor[Information Processor 6]
    Camera1 --> Processor
    Camera2 --> Processor
    Processor --> ImageProc[Image Processing Circuit 2]
    Processor --> ArithmeticProc[Arithmetic Processing Circuit 3]
    ImageProc --> Memory[Memory 5]
    Memory --> ArithmeticProc
    ArithmeticProc --> Memory
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memory 5 and in the case of collating both the data, this arithmetic processing circuit 3 applies processing of coordinate system rotation around the central axis of the finger inserting hole and decides similarity between correction data provided thereby and the other data.